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SECTION 1

OVERVIEW AND INTRODUCTION

PROJECT OVERVIEW

The City of Hesperia, per Library Bond Act Regulations, **does NOT have a library**. However, the San Bernardino County Library (SBCL) system does provide limited library services from a small, temporary space near the center of the City. These limited library services are woefully inadequate and fail to meet the needs of library patrons and K-12 students. The rapid increase in the City's population continues to exacerbate the library service gap that, without intervention (construction of a library), will continue to widen.

The City's goal is to provide expanded library services to the community in which they serve. Because the City recognizes they are not experts in providing library or School Services, they have partnered with the San Bernardino County Library (SBCL) and the Hesperia Unified School District (HUSD) to form a Library Stakeholders Committee to study the community's need for a new library. To guarantee the best possible library services, the City of Hesperia, as the applicant, orchestrated a partnership between the SBCL and HUSD in the form of a Joint Venture Cooperative Program wherein the community would benefit from the collective resources of all parties. This Joint Use Cooperative Agreement is attached as a component of the Library Bond Act Grant Application and substantial portions are also included in the Plan of Service.

The Library Stakeholders Committee conducted a Community Needs Assessment survey that identified both major library service limitations within the current county library system and future service needs. The questions ranged from hours of service, collections, technology, reader seats to location. The highest deficiency of existing library services is adequate "space". Patrons who utilize the SBCL system have commented many times that they feel like "sardines in a can" when they visit SBCL's temporary facility. Space limitations prohibit expanding library services. To improve local quality of life, the City of Hesperia developed an innovative Joint Venture initiative (in collaboration with the SBCL and the HUSD) to provide a new Hesperia Branch Library complete with augmented services to support the growing library needs of the community.

The City of Hesperia's Community Library Needs Assessment and Plan of Service, including the integrated Technology Plan, specifically document local library service needs and solutions (programs and services) that address those needs. Based upon the aforementioned documents and planning efforts, a 20,000 square foot, expandable to 40,000 square foot, library is proposed. The new library will be dedicated to providing the services as expressed by the community in the focus groups and telephone survey.

This Library Building Program will describe an optimum physical facility that provides the necessary and needed library services and the requisite building characteristics. Furthermore, this program will provide detailed information necessary for architects to design a library that will adequately meet current and future library service needs.



NEED FOR THE PROJECT

Because the City of Hesperia does not have a library, residents lack a necessary community service that is vital for educational purposes and the continued advancement of our community. This need for appropriate and adequate library services is the genesis of the City's Library Bond Act application.

To isolate the community's greatest needs for library services, an aggressive program of focus groups, community discussions, surveys, and a Community Library Needs Assessment, was implemented.

GOALS AND PROGRAMS SPECIFIC TO HESPERIA

The needs of the Hesperia community have been grouped into four distinct goals that the Library Stakeholders Committee has committed to, and as set forth in the Joint Use Agreement and Plan of Service. These goals are manifested into physical space needs including spaces (including shelving) to house collections, technology, reader seats, and study and meeting rooms. Additionally, specific current library service shortcomings formed the catalyst to develop new, expanded services that directly support all library patrons, with specific emphasis on K-12 students. The Committee has allocated individual spaces to support these goals and requisite programs. The goals and programs are as follows:

GOAL ONE: *Provide equal access to information and resources in the Hesperia Branch Library utilizing the most current technology within the library or from remote locations.*

PROGRAM

Shared Electronic and Telecommunications Services: The SBCL will provide remote electronic access to the library catalog and database subscriptions, as well as web resources linked to the library homepage, at www.sbcounty.gov/library. This program shall connect students, families, and library users with technology-based programs and resources that ultimately promote technological literacy. Residents, students, and teachers indicated that computers, and requisite computer programs, were critical to access, manipulate, and process data.

GOAL TWO: *Provide resources and services to children and young adults necessary to enable them to augment their educational needs.*

PROGRAM

Computer Center: Equip, staff, and support a Computer Center within the new Hesperia Branch Library.

GOAL THREE: *Provide resources and services to library patrons of all ages that enable them to enhance their personal, recreational, and lifelong learning opportunities.*



PROGRAM

Learning and Career Resources:

- Provide Homework Resources
- Resource Training
- Career Resources and Services

Equip, staff, and provide a variety of resources and services to provide direction for lifelong learning and personal growth for students, teachers, parents, caregivers, and adult learners. The collections, databases and services will focus on the needs identified in the Community Needs Assessment and are identified in the Plan of Service for the Hesperia Branch Library. Learning and Career Resources will be located adjacent to the Library's Computer Center and Community Room. County staff, (Joint Use Specialist, Young Adult Specialist, Children's Librarian), and County-trained volunteers will provide assistance during public service hours.

GOAL FOUR: *Provide the opportunity for adults and families to participate in literacy services and programs to improved their literacy and computer skills.*

PROGRAM

Study/Tutoring/Literacy Rooms and Community Room: Equip, staff, and support Study and Community Rooms within the new Hesperia Branch Library.

PLANNING FOR FUTURE NEEDS

Because the City has committed to operating a library for a 40-year period, the City was challenged to think progressively so that the new library is designed to meet both current and future library service needs and to be flexible enough to adapt to changing technology, community demographics, and literacy initiatives that will be the basis for K-12 curriculum in the coming decades.

PLANNING THE LIBRARY

The focus groups and telephone survey participants both indicated that the general area wherein temporary library services are now provided should be considered as a location for the proposed Hesperia Branch Library. The City concentrated on keeping the new site close to Main Street and centrally located for easy access to public transportation and a large concentration of schools. Construction of the new library will bring the vision of the City to reality by being the cornerstone of a new civic center "campus".

The City formed a Library Construction Advisory Committee to plan the new library, and they are engaged in all of the pre-planning activities such as assessing community needs, agreements and resolutions, assessing library service needs, programming, focus groups, workshops and fund raising.

The City has commissioned professional library planners and architects to perform the needs assessments, develop building programs, conduct workshops, and develop conceptual plans. In addition, the entire Library Stakeholders Committee is tasked with the effort to prepare the Library Construction Bond Program grant application.



A major fund raising campaign involving all segments of the community, including students, business owners, seniors, civic groups, and general citizens is underway. The group's motto is "Hand in Hand, Together We Can!" The excitement generated has been overwhelming as evidenced by the community penny drives, car washes, garage sales, and bake sales.

PROJECT SCHEDULE

Generally, if there are no major schedule impacts and the Grant Application is approved the following proposed schedule would apply.

ACTIVITY	DATE
Site Acquisition	February 11, 2003
Schematic Plans Completion	January 1, 2004
Design Development Plans Completion	April 1, 2004
Working Drawings (90%) Completion	October 1, 2004
Construction Drawings Completion	January 1, 2005
Project Advertised for Bids	March 1, 2005
Start of Construction	April 1, 2005
Estimated Mid-Point of Construction	October 1, 2005
Completion of Construction	April 1, 2006
Grand Opening of Library to Public	June 1, 2006
Final Fiscal & Program Compliance Review Completion	September 1, 2006

To the extent possible, the City will implement procedures within their control that may assist in expediting these activities for the purpose of delivering a completed library sooner. For example, the City will consider approving sequential building permits that would allow for site work and grading permits to be issued prior to final approval of building plans. This sequencing of entitlements provides maximum flexibility and could result in economies of scale and cost savings.

RELATIONSHIP OF THE BUILDING PROGRAM TO THE ARCHITECTURAL DESIGN PROCESS

GENERAL

The Building Program proposed for the Hesperia Branch Library frames the design characteristics for the architect. The interrelationships of the Building Program to design are drilled-down into sub-topical discussions relative to how quantitative and qualitative issues affected the overall process. The overall purpose of the Hesperia Branch Library Building Program is to:

- Describe the purpose, function, and scope of the Hesperia Branch Library
- Provide a means to relay appropriate information to design professionals
- Define the general requirements of the library, spatial relationships, aesthetics, and site orientation



- Reduce the special library service needs as identified in the Needs Assessment to specific areas in the building and details their purposes, spatial requirements, service capabilities, capacity, functional relationships and adjacencies
- Translate the Joint Use/Joint Venture services into physical space requirements
- Orchestrate the integration of new technology
- Offer intelligence to those unfamiliar with library functionality, services, and spatial requirements
- Serve as a management tool to ensure that building plans and specifications match the goals and objectives of the project
- Serve as a check and balance system to ensure performance compliance

This Building Program was written for an audience not experienced in constructing or managing a library construction project and the terminology and information is intended to encourage engagement of all Library Stakeholders.

Finally, each stage of the architectural design process - conceptual, design development, and construction plans will be cross referenced against this Building Program to ensure that they meet the library programming requirements.

QUANTITATIVE

The programming process is a formulation of the expressed needs (Hesperia Community Library Needs Assessment) of the community into physical space. The program is organized around main space divisions such as the Children's area, Fiction and Non-fiction Collections. These divisions are built around sub-divisions that have assigned furniture and equipment, and net assignable square foot allocations. These square foot calculations are divided into two categories:

Assignable – Area assigned to an individual inventory item such as furniture or equipment that require a “footprint” within the floor space of the library. These individual items are assigned to divisions within the library, such as children's, fiction, or computer center, and then subtotaled. Hesperia's assignable square feet is 15,500.

Non-Assignable – Area assigned to the support functions of the library such as circulation around to each library division, wall thickness, electrical, data, janitorial, and restroom rooms. These equate to 4,500 square feet or 23% of the total library square feet of 20,000.

Various services including Reference, Learning & Career Resources, technology (Computer Center), and circulation are programmed spatially into the facility to support the various library patron constituencies.



The quantitative data is described within this report and will be utilized to begin designing the library. The functions and their relationships to each other will shape the building design from the inside out. The building shape is also influenced by the constraints and opportunities of the site. The architect must find a balance between the two factors.

The numbers and descriptions will be tested in a scaled plan and reviewed by all team members. It can be said that the program is like a road map. The general and specific space descriptions helped the design team develop a conceptual plan. The plan, in turn was utilized to develop a preliminary cost estimate based on sound guidelines from both the program requirements and the conceptual plans.

QUALITATIVE

The “qualitative” aspects of a library and what this type of facility can do for a community is far more significant than most other services local government can provide to support its residents. A public library outranks most other services that a community can do to help its people. Providing a state-of-the-art library facility is a primary goal of the City, one they have committed significant capital and human resources to accomplish. Hesperia has grown so fast and is in desperate need of an identity, a sense of place, a community spirit. The City is looking for a “heart”—a central, common place to visit, interact, explore, and research. The new library will serve this purpose.

To encourage community engagement of various Library Stakeholders and constituencies into the design process, the City’s architect orchestrated community workshops to gather input regarding the many “qualitative” aspects of a library. The workshops were interactive and explorative to help patrons feel free to express their desires. This process also helped build consensus for the priorities of the library project. The public was invited to attend a number of workshops, along with the City’s Library Construction Advisory Committee consisting of two City Council Members, one HUSD School Board Member, the County Librarian, two citizens at-large, and the Friends of the Library.

Listening exercises involved discovering what is unique to Hesperia. Themes explored revolved around “Who Hesperia really is” and “What is their unique story that is unlike any other city in California”. The following are attributes unique to Hesperia as described by the attendees of the numerous workshops and community forums and focus groups:

Describe the physical nature of Hesperia...

- Clean air
- Night sky
- Joshua trees
- Railroad bisects town
- Hesperia Lake
- Contrast of Mountain range with the Valley
- Extreme climate
- Route 66



What are the dreams of Hesperia residents for the Library Building?

- Sense of Place
- Community gathering areas
- Family oriented
- Demonstrate progress
- Local Arts
- Arbors (human scale)
- Water elements (to contrast our hot weather)
- Reclaimed water for irrigation
- Sustainable architecture
- Trails
- Removed from automobiles
- Views to gardens not cars
- Quiet reading areas
- Laptop access

The next exercise asked the participants to take (3) red dots and place them next to their highest priority for the new Hesperia Library. Out of 13 items to select from, the following lead by a large vote:

- Aesthetic connection to the Civic Complex
- Sustainable/energy efficiency
- Fireside reading/Heritage room, and the use of natural light
- Themed Children's area

Another exercise involved evaluating and ranking computer images of building aesthetics, collections, elevations, and other design features that best matched their answers to the aforementioned questions. The final exercise had the group rank color preferences, which included warm desert colors with small accents of cool purples and blues.

IMPORTANT LOCAL PRIORITIES AND THEIR AFFECT ON THE BUILDING PROGRAM¹

The various community engagements resulted in several design suggestions that were incorporated into the ultimate design of this Building Program. Suggestions that surfaced in the various meetings that could influence the final library design are discussed here. These topics relate to overall building design. To the contrary, the Joint Venture program described in the Plan of Service and Joint Use Cooperative Agreement represents a “design mandate” and those specific spaces to support Joint Use initiatives are absolutely incorporated into this Building Program.

AESTHETICS AND CIVIC CENTER CONNECTION

Because the proposed Hesperia Branch Library is the first foray into the new Hesperia Civic and Government Center Complex, it was very important to everyone that the building design incorporate appropriate architectural character consistent with the City's downtown revitalization efforts and become the genesis of a new design standard that

¹ Although not required by the Library Bond Act Regulations, this added section reflects the extent that the City sought the engagement of the entire universe of library patrons to frame library design and management.

would set it apart as a local landmark. The City's arid climate and 350+ days of annual sunshine encourage the appropriate use of windows to capture natural light for reading and heating.

The community expressed a preference for a connection to the proposed Civic and Government Center Complex and the library's ultimate architecture will be designed to support the master plan for the entire area. Architectural standards for these building will ensure a common theme and discourage disparate design.

Because a central park is part of the overall vision of the Civic Center, the library will be oriented to encourage outdoor activities, at the same time having a shared entry pathway and entrance from 7th Avenue.

SUSTAINABLE ENERGY EFFICIENCY

Hesperia is a relatively young city and its populace is very conservative. Because the City has limited financial resources it was strongly recommended by the Library Stakeholders that the library design incorporate optimal mechanical systems and low maintenance building materials and finishes that can withstand the extreme weather conditions common to the high desert region. Pragmatic design suggests that the interior be flexible to accommodate the likely service need changes of library patrons over the life of the library. Careful cost/benefit analyses must be undertaken to evaluate whether higher "one-time" initial construction costs are the desired alternative to higher, "annual" long-term operational and service costs that are associated with greater staffing, increased utility usage, etc.

SPECIALTY ROOMS – HERITAGE/FIRESIDE

A common chorus amongst library users, focus groups, and other patrons was the need for a comfortable reading environment for recreational reading activities. No such environment exists currently within the city, and it is expected that more people would utilize the library if such a space was available in a safe, cozy, welcoming, and quiet setting.

THEMED CHILDREN'S AREA

To promote literacy and the congregation of children and their parents it was suggested that a themed children's area be part of the Library Building Program. The ability to have a secure and safe place for children to learn was paramount in this planning discussion. An exciting, inviting children's environment will encourage repeated library usage and promote study and learning.

ROLES OF PROJECT TEAM MEMBERS

The Library Building Program Team consists of members from the Library Stakeholders Committee who developed the Community Needs Assessment. They are listed below.

Title	Name
City of Hesperia	
Economic Development Director	Steve Lantsberger, CED
Community Development Director	Tom Harp
Hesperia Unified School District	
Board Member	Eric Swanson
San Bernardino County Library	
County Librarian	Ed Kieczkowski
County Library Facility Manager	Patricia Laudisio
Consultants	
LPA, Inc. Project Architect	Jim Wirick, AIA
LPA, Inc. Project Designer	Rick D'Amato
LPA, Inc. Interior Designer	Chris Lentz
Griffin Structures Project Manager	Roger Torriero
Griffin Structures Cost Estimator	Jim Trammel

The team members were selected to serve as representatives of various cross-sections of the leaders within the community. They met bi-weekly and participated in many activities including the following:

- Role setting or ranking library activities
- Reviewing focus groups and telephone surveys results
- Identifying opportunities for the Joint-Use with the School District and San Bernardino County Library System
- Determining operational issues with the County and City
- Reviewing the Community Needs Assessment recommendations
- Reviewing the Library Program consultant's results
- Reviewing site selection and design
- Reviewing Adjacency Diagrams
- Reviewing Floor Plans and Elevations

This project has been led by the City's Economic Development Director who serves as the Project Manager. Through his direction the City acquired necessary consulting expertise, optioned and ultimately purchased a library site, hired an architect, and created a structure for which to develop the Library Bond Act Grant Application. The San Bernardino County Librarian and Facility Manager played integral parts in the development of the Joint Use Cooperative Agreement.

The City Manager served as the conduit between staff and the Hesperia City Council. The Council was kept apprised throughout the process and included in the early stages of conceptual design. The Council also provided the necessary funding for the local



match and the other necessary commitments to ensure eligibility for Library Bond Act funding.

The City's Community Development Director oversaw the preparation of the required CEQA documents and ensured that all entitlement processes were completed.

The architectural firm worked in unison with the City's Public Information Officer to conduct community meetings; develop and present conceptual designs and site plans; and make presentations to the many focus groups, stakeholders, and City Council.

The Executive Management Staff of the City served as a Technical Advisory Committee (TAC) to assist in the development of the grant application and provide technical expertise on many issues. The TAC assisted with community outreach, orchestrated focus group meetings, facilitated the CEQA process, networked with other governmental agencies, and evaluated library design concepts advanced by the architect.

Each of the City's department and division heads were assigned, and completed, specific tasks to support the evolution of this project from a concept to a well-articulated plan that would form the basis of the City's Library Bond Act grant application. In the end, each and every member and collaborator worked tirelessly to produce the best work product for the purpose of providing quality library services for the community.

To guarantee the community's stake in the library design process, the City assembled a Library Construction Advisory Committee. They represented the following sectors of the community:

City Council	(2)
Local Business Leaders	(2)
Friends of the Library	(1)
Hesperia Unified School District Board of Trustees	(1)
County Librarian	(1)

City staff members were also actively involved in this committee. The committee's main purpose was to review the proposed library at various stages of design to ensure that it was consistent with perceived community needs. The Committee was also an integral part in helping build consensus among the various Library Stakeholder groups that ultimately led to the development of the Joint Use Cooperative Agreement.



SECTION 2

GENERAL REQUIREMENTS OF THE LIBRARY BUILDING

The Hesperia Branch Library is designed to accommodate the diverse needs of our students, seniors, business owners, teachers and residents. The openness of the new library design will encourage browsing and easy internal circulation while providing easy staff supervision. Careful integration and orientation of shelving will allow patrons to retrieve a book, conduct research, study, receive tutoring or simply enjoy a good book comfortably within the same space. Casual, recreational reading in a comfortable, warm setting will be encouraged with comfortable, functional seating in the Fireside Area at the southwest corner of the library.

Promoting literacy and learning initiatives are core goals of the Hesperia Branch Library and patrons will have options for a more private, quiet experience or larger group study sessions as provided by the Study Rooms. Effective design will enable these rooms to be easily supervised and acoustically isolated, as to not inconvenience other library users.

Because this project is a Joint Use Cooperative Venture, with emphasis on services for K-12 students, many special areas and services have been developed specifically for this age range. A Computer Center, Community Meeting Room, Learning and Career Resources area and Study Rooms were integrated into the new library as a direct result of the Community Library Needs Assessment.

OCCUPANCY BY STAFF AND PATRONS

Good library design dedicates a higher ratio of space to patrons, while still dedicating efficient space to staff for the performance of daily service functions. By locating staff spaces within the major library divisions, staff has easier access to patrons, instead of locating them in workrooms behind closed doors. The benefit the City of Hesperia realizes by partnering with the County is that all of the administrative functions needed in a library, such as entering a new acquisition into a library database, is handled at the County facility in San Bernardino, which represents a large savings of space that would be needed to perform this task intensive activity at the new library.

Accepted library guidelines equate reader seats to population size. Hesperia utilized the Wisconsin Division of Library Services recommendations of approximately 2.5 seats per capita, which is calculated by dividing 1,000 into 62,585 for a (63) factor, and then is multiplied by 2.5 equaling 158. The Hesperia Branch Library will have 154 reader seats. Library patrons will be able to utilize seating within the spaces for two main functions: studying and lounging. Seating is comprised of study seats at tables and carrels, both found within the three Study Rooms, and in the open collection areas. They also include lounge seating located in the Children's area (for parents) and in the periodical and young adult sections. The Children's program area holds 34 floor spaces for story time and the Community Room holds 120 meeting seats.

The new library will have 53 technology workstations, twenty of which are dedicated to the Computer Center. These are 53 additional seats to the reader seats. The remaining 33 are spread throughout the Reference, Young Adults, and Children's divisions,



including six seats dedicated to the new Learning and Career Resource area for homework resources, resource training, and career resources.

Classification	Sub-Classification	Type of Seating (maximum)	Amount of Seating
Public occupancy	General reader seating	Readers seats	116
	Young Adult	Reader seating	14
	Study Rooms	Stackable chairs	20
	Learning & Career Resources	Reader seating	4
Reader Seats			154
	Computer seating	Computer Workstations	53
	Community Room seating	Stackable chairs	120
	Children's program area	Children's folding chairs	34
		Subtotal	361
Staff occupancy	Public Services	Reference	2
		Circulation desk	4
		Staff lounge	7
		Children's workroom	1
		Librarian offices total	7
		Subtotal	21
Friends of Library		Volunteer – Workers	2
		TOTAL PERSONS	384

ALLOCATION OF THE LIBRARY'S READER SEATS**Allocation of the Library's Reader Seats**

TYPE OF	QTY	UNIT	TOTAL
Children's			
Chair, Child's	16	0	0
Chair, Lounge	2	35	70
Table, Children's	4	80	320
Chair, Juvenile	16	0	0
Table, Juvenile	4	85	340
Stool, Child's	1	0	0
Juvenile			
Chair, Juvenile	16	0	0
Table, Juvenile	4	85	340
Fiction			
Chair, Lounge	6	35	210
Chair, Reader's	12	0	0
Table, End	2	12	24
Table, Reader's	3	80	240
Learning and Career Resources			
Chair, Reader's	4	0	0
Table, Reader's	1	80	80
Non-Fiction			
Carrel, Reader's Wood	8	40	320
Chair, Reader's	24	0	0
Table, Reader's	4	90	360
Periodicals			
Chair, Lounge	8	35	280
Chair, Reader's	4	0	0
Table, End	2	10	20
Table, Reader's	1	90	90
Public Meeting Rooms			
Literacy/Tutoring/Study Room			
Chair, Group Study	8	0	0
Literacy Tutoring Counter	1	40	40
Table, Group Study	1	160	160
Study/Tutoring Room A			
Chair, Group Study	6	0	0
Table, Group Study	1	160	160
Study/Tutoring Room B			
Chair, Group Study	6	0	0
Table, Group Study	1	160	160
Reference			
Chair, Reader's	12	0	0
Table, Reader's	3	100	300
Young Adult			
Chair, Lounge	6	35	210
Chair, Reader's	8	0	0
Table, End	1	12	12
Table, Reader's	2	80	160
TOTAL			3,896



The County has proposed providing 12 (Full Time Equivalent) staff members for providing service and support at the new library. The County has dedicated the following positions:

- Branch Manager
- Children's Librarian
- Reference Librarian
- Young Adult Specialist
- Literacy
- Joint Use Specialist
- Library Assistants
- Library Pages
- Volunteers

The above staffing was determined by the County to be adequate personnel as required to provide for user needs and supervision in each of the public areas.

As noted in the Joint Use Cooperative Agreement between the City of Hesperia, Hesperia Unified School District, and San Bernardino County Library, volunteers will be recruited, screened, trained and supervised through the San Bernardino County's Library Volunteer Program. Volunteers will assist with services and programs under the guidance of the Hesperia Branch Library staff and Hesperia Unified School District staff. Students and parents will be encouraged to serve as volunteers for peer assistance and adult oversight for the Joint Use K–12 programs and resource applications.

The staff will have the benefit of three service desks – Circulation, Reference, and Children's. There is one Branch Manager office and a staff workroom to accommodate four full time workstations and several shared work areas for part-time, school district trainers, and volunteers. The Children's area has a dedicated workroom for storage and creation of program materials. The space dedicated to staff is only 13% of the overall 20,000 square foot library.

Occupancy loads for the individual areas have been based on projected attendance and community programming, including input received from the various focus groups.

TYPE AND SIZE OF THE COLLECTION

The collection development plan for the new Hesperia Branch Library allocates a total collection of 87,720. The collection breakdown is shown in the table within the section "Hesperia's Collection." A collection of this size represents 1.35 items per capita for the Hesperia Branch Library service area. Because this library will be integrated into the San Bernardino County Library System, library patrons will have access to the over 1.1 million items in the county's collection.

HESPERIA'S COLLECTION

The collection of the Hesperia Branch Library shall meet, or exceed, 87,720 items, with the County transferring over 56,138 items to the new City Library. Collections include print materials such as books, both hard and soft covers, audio-visual media such as videos, CD's and cassettes and periodicals.



The Space Needs Assessment has a further breakdown of collection type utilizing the *Libris DESIGN™* program. A majority of the shelving was calculated as 36" wide x 90" high double face with 14 shelves. Variety occurs in specialty shelving areas such as Children's, Browsing, Ready Reference, and Periodicals.

LIBRARY COLLECTIONS TYPE

Space	Type of	ITEM Qty.	ITEM Sq. Ft.	TOTAL Sq. Ft.
AUDIO-VISUAL LIBRARY				
AV Collection				
	Audio Book Rotor Tower DF 66" Shelving Unit	2	18	36
	Audio Cassette Rotor Tower DF 66" Shelving Unit	1	18	18
	CD-ROM Rotor Tower DF 66" Shelving Unit	3	18	54
	DVD Rotor Tower DF 66" Shelving Unit	1	18	18
	Video Cassette DF 66" Shelving Unit W/10 Divider Shelves	3	20	60
BROWSING				
New Book Display				
	42" Aisle DF 45"H Steel Shelving W/ 6 Shelves	2	20	40
	44" Aisle DF 45"H Newspaper Display Shelving W/4 Shelves	4	22	88
CHILDREN'S LIBRARY				
Children's Collection & Seating				
	36" Aisle DF 45"H Steel Shelving W/ 6 Shelves	14	18	252
Children's Reference Collection & Seating				
	36" Aisle DF 45"H Steel Shelving W/ 6 Shelves	6	18	108
Juvenile Collection & Seating				
	36" Aisle DF 66"H Steel Shelving W/ 10 Shelves	29	18	522
	36" Aisle SF 45"H Magazine Display Shelving W/ 2 Shelves	2	12	24
FICTION COLLECTION				
Fiction Collection & Seating				
	36" Aisle DF 90"H Steel Shelving W/ 14 Shelves	37	18	666
LEARNING / CAREER RESOURCES				
LCR Collection and Seating				
	36" Aisle DF 66"H Steel Shelving W/ 10 Shelves	3	18	54
	36" Aisle DF 66"H Steel Shelving W/ 8 Shelves	5	18	90
NON-FICTION COLLECTION				
Non-Fiction Collection & Seating				
	36" Aisle DF 90"H Steel Shelving W/ 14 Shelves	74	18	1,332
PERIODICALS COLLECTION				
Current Magazine & Newspaper Display & Seating				
	44" Aisle SF 66"H Magazine Display Shelving W/3 Shelves	10	14	140
	44" Aisle SF 66"H Newspaper Display Shelving W/3 Shelves	2	14	28
REFERENCE SERVICES				
Reference Collection & Seating				
	36" Aisle DF 45"H Steel Shelving W/ 4 Shelves	2	18	36
	36" Aisle DF 45"H Steel Shelving W/ 6 Shelves	12	18	216
	36" Aisle DF 78"H Steel Shelving W/ 10 Shelves	26	18	468
Reference Desk				
	36" Aisle DF 45"H Steel Shelving W/ 6 Shelves	8	18	144
YOUNG ADULT SERVICES				
Young Adult Collection & Seating				
	36" Aisle DF 66"H Steel Shelving W/ 10 Shelves	5	18	90
	44" Aisle SF 66"H Magazine Display Shelving W/3 Shelves	2	14	28
TOTAL		253	404	4,512



COLLECTION ALLOCATION

The San Bernardino County Library has developed the collection in six ways, as outlined in the Plan of Service. They relate to current topics and titles, general information, formal learning support, lifelong learning, basic literacy, and information literacy. These six service roles meet the four goals of the City of Hesperia, the Hesperia Unified School District, and the County, as outlined in the Joint Use Agreement.

- Hesperia Branch Library will facilitate the **Current Topics and Titles** role by providing a collection of current books, electronic databases, audio materials, compact discs, video recordings, magazines and newspapers for adults and children that are selected to fulfill needs for information about popular, cultural, and societal trends, as well as to entertain.
- A second role to be filled is **General Information**, with the goal being to meet patron needs for information and provide answers to questions on a broad array of topics related to work, school, and personal life.
- A third role performed includes **Formal Learning Support** to help students of all ages who are enrolled in a formal program of education.
- A fourth role includes **Lifelong Learning**, providing lifelong learning opportunities by assisting patrons who desire self-directed personal growth.
- Lastly, two necessary roles are **Basic Literacy**, providing services that address the need to read and to perform other essential daily tasks and **Information Literacy**, to help address the need for skills related to finding, evaluating, and using information effectively.

The County best describes their processes each year of purchasing new books. The types, sizes, and purchase patterns are interrelated. One cannot be justified without the other. Branch budgets reflect branch circulation directly, with budgets approximately proportional to annual circulation rates. Once the branches are ranked in order by annual circulation stats, the budgets for each genre/format are established by the overall circulation (e.g. if picture book circulation represents 33% of the total juvenile circulation, 33% of the juvenile budget would be allocated for the purchase of picture books). The county currently places priority on reference, community information, early childhood, popular materials and educational enrichment for the school-aged. The library emphasizes very current, high demand resources in order to meet patron's needs.

Each year branch managers and their staff review their local collections and develop a purchasing profile for the new fiscal year. They consider the condition of the collection, materials usage, circulation, and patron requests when developing their profiles. So far, branch managers have been using soft data information. In 2002, collection development began to compile material code and Dewey division statistical information in a manner that can be used to support the development of the profiles and drive purchasing decisions. Also, SBCL purchases materials written in Spanish and a variety of Asian languages to meet the needs of their bilingual and limited English patrons.



Demographic information based on U.S. Census and California Department of Education information, in particular, influence foreign language acquisitions.

As discovered in the focus groups and telephone survey in the Community Needs Assessment, the County and School District have developed a Joint Use Agreement to provide additional services emphasizing K-12 student activities. The collections support those activities with print materials such as homework reference curriculum, textbooks, college prep, and career books.

SHELVING TYPES AND SIZES

Library shelving has many varieties of depths and heights for all the different collection materials. Generally, the goal for shelving types is to keep as much uniformity as possible, to maintain “like” quantities for reconfiguring. A majority of shelving for libraries is heavy gauge steel with adjustable shelves and vertical upright supports. California codes require seismic bracing per Zone 4. End panels and canopy tops, both metal and wood, can help visually organize and enhance the physical appearance. In addition, they provide consistent backdrops for signage placement, which will assist the patrons in locating information more easily, in lieu of constant staff assistance.

A shelf refers to a single unit whether double or single face. A range is multiple shelf sections set together. Per code, spacing between ranges can be 36” wide although a 44” wide aisle is required in more frequently occupied collections, such as periodicals.

Shelving is referred to as double-face (DF) or back-to-back or single face (SF) one sided. A majority of the shelves are 36” wide for consistency and strength. However, 30” and 42” are also available. Odd sizes, such as 32 ½”, are available on a custom basis for purposes of meeting a specific wall dimension or recessing shelves into a niche. Standard depths for most collections such as Fiction and Non-fiction are 9”-10”. However, Reference and Children’s picture books need 12” depth.

Shelving also comes in a variety of heights – 42”, 45”, 66”, 78”, 84” and 90”. Lower heights are for smaller scale patrons and assist staff in visual supervision. Recommended collections to be housed on lower shelves include Periodicals, Children’s Juvenile, and Young Adult. In addition, Reference materials are heavy and larger than Fiction and Non-Fiction books and are recommended to be no higher than 78.” Two options for supporting patrons and staff in accessing the heavy books are described as follows:

- Provide every other range at 45” high so patrons can pick a book off the high shelf, turn around, and rest it on top of the 45” high top. Of course the offset is that the library can house fewer collections on the lower shelves.
- Provide a shelf option that retracts in and out, upon which, one can rest materials. This is less costly, maintains the reference collections sizing and promotes consistency of shelving heights.

Shelf options are numerous and support the various sizes of materials. Most shelves are adjustable on a 1” increment. Basic bookshelves should have a back edge so books will not fall back into each other, especially if double faced. Shelves can have individual labels and wire book ends to hold books in place when the shelf is not full. Another



helpful consideration, if there is an adequate budget available, is to provide an angled shelf at the bottom, so patrons don't have to bend down to read the small titles. Some of the specialty shelving is listed below:

- Audio-visual shelving accounts for the most variety with many ways to house the multitude of sizes from cassettes to Videos to CD's. Caution should be exercised here in finding common dimensions, so as formats of the medium change over the years, entire inventories of specialty shelving do not become unusable for other formats.
- Periodical shelving is slanted to allow for the display of the cover of all of the collection titles. Most of the titles are popular, cultural and recreational selections. Also available are periodicals on CD-ROM databases for more research-based sources. More common in library branches is for the back issues to be housed underneath the current title, as the slanted shelves hinge open and allow for additional storage.

Volumes per lineal foot are another method of studying collections and the shelves required to support the collection. The depth of books is important in calculating the shelves required for the collections. Below is a list of average volumes per lineal foot based on collection type:

Collection	Volumes per lineal foot
Browsing	8
Careers	8
Children's	20
Fiction	8
Juvenile	13
Large Print	8
Non-Fiction	8
Paperbacks	16
Reference	6
Textbooks	8
Young Adult	12

FLEXIBILITY AND EXPANDABILITY

Because of the unique aspects of library construction, although a highly desirable community need and the unknown demands on its program, increased emphasis must be placed on flexibility and expandability. The more initial consideration given to design flexibility and expandability the greater future sustainability achieved, a primary goal of the Hesperia residents. Design flexibility will afford the Hesperia Branch Library to adjust to changing use patterns, technology advancement, and services.

Site expandability should be a top goal when reviewing multiple locations. The City of Hesperia responded and acquired a site adequate to double the library from its proposed 20,000 square feet to 40,000 square feet when library usage and community

demographics warrant the expansion. Building placement and orientation on the site is the next emphasis. Further micro components, when analyzing expandability, are the building core functions. These functions, by their nature, support the infrastructure of the building design and performance. Therefore, elements are associated with their use that should not be moved, as cost will be an issue. These elements can include plumbing and sewer lines, electrical wiring and cabling, which are generally located under the concrete slab. Also, there are large structural footings that support the building. As shown on the proposed Hesperia Branch Library Floor Plan the expansion area will connect via the south wall. The library administrative and circulation functions were designed to be able to accommodate the first phase construction (20,000 square feet), and also serve the expansion area in the future.

Because the City of Hesperia plans on expanding the library, and has dedicated land for that purpose, placement of key rooms is critical to the future success of the expansion.

These rooms/elements are:

- Restrooms
- Electrical room
- Communications room
- Janitor's closet
- Structural elements such as columns, load bearing walls, fireplace

Some dedicated library spaces such as the following will most likely not move:

- Book returns
- Fireplace
- Counters with plumbing
- Staff lounge with sinks
- Study Rooms
- Computer Center
- Community Room and associated kitchens

Minimizing load bearing walls and maximizing bay width (column spacing) will increase interior flexibility. This proactive planning will ensure that library staff will be able to respond to changes in service patterns and needs by rearranging furniture and equipment rather than embarking on expensive building remodeling or renovation programs. Another design consideration when sizing structural column spacing is to determine the common centerline dimension of shelving. This will allow shelving ranges to be consistent with column placement on the end and the centering of the shelving ranges. Space can be wasted if shelving has to be spaced farther apart due to a column in the center of the aisles. Typically a 5'-0" centerline is acceptable, which is calculated by adding 36" for the aisle and 12" for each opposing shelf. Whenever possible modular and moveable furniture should be considered.

It is a good idea to size the core rooms appropriately from the beginning because they can be too difficult to expand later. Location is critical! If placed appropriately with expansion in mind, they can increase in size in the future to accommodate additional library square feet. Placement of the specific items within the room is also important. Some obvious ones are listed below:



- Main point of building entry conduit for, fiber and/or data and phone lines, from the street are critical to library technology functions and should be located on an interior wall that will be protected and not moved within the communications closet.
- Electrical transformers that connect building power with site utilities, when located within an electrical closet are very costly to move, especially if they only need to move to another wall within the same room.

Sometimes these rooms can be allocated to another function in the future if the appropriate location is available to support the expansion plans.

Within these interior rooms, the design team must consider the locations of fixed items such as built-in millwork desks and cabinets with sinks. Again, electrical, data, and plumbing support is costly to move.

STAFF EFFICIENCY

With the staff areas accounting for only 13% of the library square feet, the need for good design and flexibility within their areas is even more important. Although wall separation is required for half of their areas, the consideration of the elements placed inside is essential. Furniture flexibility is key. Staff tasks vary per dedicated area. Workrooms in the non-public areas are for book sorting, mending, and program development, while main service desks are for assisting patrons, researching, answering phones, etc.

The staff workroom should be well planned out with multi-function tasks in mind. Many volunteers will assist and need work counter space for a variety of tasks. Flexible work surfaces and storage components should be utilized, in lieu of fixed millwork construction. Sight observations and communication between the librarians and interior designer, will help the designer understand the functions and tools required, and plan accordingly. Of 12 staff members, there are only four full-time (FTE) flexible systems workstations planned for the workroom and they require only 40 square feet each which equates to a 6'x7' footprint. This is for concentrated program planning.

By adding three service desks – Circulation, Reference, and Children's - staff is interspersed amongst the library collections, seating, and patrons, instead of behind the scenes in the workroom. The placement of these three service desks also assists with supervision.

Adjacencies of areas such as the workroom, circulation desk, and book return, if arranged appropriately, will help with staff efficiency as well. By providing a separate book return room next to the indoor book drop, the staff will be more effective when they will not be "double handling" the books. The procedure will be to load the returned books directly from the book drop cart onto the book truck, scan the books back into the system, and wheel them out to the shelves to be re-loaded directly back onto the assigned shelf. This will help expedite a very time consuming and important task, getting the books back on the shelves and into the patrons' hands.

Because staffing is the largest single expense in the annual operation of a library, caution should be exercised in design processes to maximize the efficiency of all staff. Unobstructed sightlines for supervising sensitive areas such as personal computer



stations, is critical. To minimize the potential for theft, visual control must be possible for entrances, exit doors, emergency exits, etc. Mirrors, video, and security cameras can increase staff efficiency immensely.

ENERGY EFFICIENCY

The City of Hesperia desires to reduce their long-term cost of facility operation by implementing aggressive energy conservation measures. Alternatives will be evaluated via life cycle costing, including construction costs, maintenance, and energy costs, and evaluation of qualitative aspects of the alternatives, in order to optimize each component of the design. Building insulation in walls and ceilings and appropriately sized HVAC systems will also contribute to energy efficiency.

The proposed mechanical and electrical systems, and building envelope should be thoroughly analyzed for life cycle costing using state-of-the-art computer programs and current energy costs. This analysis should be completed, and yet needs to be sensitive to the needs of the owner and architect, by responding with the most cost-effective designs available. It is important to emphasize that the intent of this process is not just to reduce the initial construction costs, but rather is intended to provide an overview of options available to the City of Hesperia, as the owner, and the initial and long-term cost associated with each choice.

Energy conservation planning should trace each concept from their end use through the rooms or areas and returning back to the energy sources. Energy conservation begins, however, with the building engineers.

The building should be oriented to take advantage of passive solar energy. Passive conservation systems depend on the fact that the sun is high in the sky in the summer and lower in the winter. This can be achieved by implementing louvers and deep overhangs. Too much glass facing due west in a hot climate overwhelms even the best air-conditioning system, and too much glass facing north in the winter season may force the heating system to work too hard. Even with significant window coverings, the heat gain alone can be problematic. While north light is the best light for reading and work tasks, and east light is the next best, a careful balancing of glass area with energy consumption for heating, cooling, and lighting must be attained.

Considerations will be made for evaluating all building elements utilizing the LEED™ (Leadership in Energy and Environmental Design) methodology to help make decisions. LEED™ is a formal point system for measuring the sustainable and energy efficiency aspects of the “built environment”. The U.S. Green Building Council has developed the system around five key initiatives: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, and Indoor Environmental Quality. Additional points can be obtained in the Innovation and Design Process.

As technology advances, so does the energy it takes to support those advances. Even energy saved by specifying flat panel computer monitors should be considered.



FENESTRATION

Natural lighting is preferred in a good library design. Taking advantage of proper site orientation and by locating exterior glass walls on the north side of buildings is a very efficient way the library could benefit from natural light. Locating reading and study tables along these vistas is a welcoming and enjoyable place for all library patrons. On the opposite side of the building, controlling glare from exterior light sources can be costly and sometimes overlooked.

Shaded glass admits only one-quarter of the radiant heat admitted by un-shaded glass exposed to sunlight. Double-glazed, shaded, heat-absorbing glass reduces heat gain by about 85 percent. Reflective glass reduces heat gain by about one-third, but is very impersonal. Consideration should also be given to low-e glass, recognizing that it does restrict daytime views into the building's interior; however, it does create a more solid look.

The Hesperia Branch Library conceptual design calls for significant tinted glass areas integrated into the north wall. Strategically placed metal louvers will compliment the various window placements to minimize negative effects of natural lighting, specifically heat and glare.

Many interior rooms of the library need glass walls for visual control. These rooms are the Branch Managers office, Friends of the Library room, Copy room, Children's workroom, Computer Center, and Study Rooms.

Operable windows are also desirable for periods of mild weather, particularly in the staff areas. These windows should be considered in the context of the overall building security plan. Operational windows in the general library area should be encouraged in the unfortunate event of HVAC failure. Fenestration should not cause peril to book stacks or other sensitive materials within the library. Annual maintenance costs of windows should also be a consideration.

SPACE FINISHES

The interior finishes of a library can compliment the design theme for years to come. However, the abuse and wear and tear from many patrons utilizing the library can deteriorate after time if not properly specified. Selecting finished products that have a timeless design and color scheme and utilizing long standing, reputable commercial manufacturers will go a long way for these lifetime projects. Avoid the "too good to be true" low cost alternatives, if at all possible.

FLOOR FINISHES must be of heavy commercial quality, stain resistant, dirt repellent, durable and as maintenance free as possible since they will get heavy traffic. For acoustic reasons most of the areas within the library should be carpet, which is why it is the most important choice in a project.

Carpet is made in either 12'-0" wide broadloom, 6'-0" wide vinyl backed or vinyl backed carpet tiles (square). Broadloom is either woven or tufted. Small-scale timeless patterns with medium to dark tones are preferred. Loop patterns with the yarns locked into the backing with either a woven or integral vinyl backing system, such as carpet tile, are preferred and will avoid the "zippering" effect. Broadloom if chosen, should not have a



pad installed but be glued directly to the floor slab. Libraries, because there are vast open areas, should avoid stretching carpet over a pad. Another reason why carpet tile is so desirable is because it has an attached backing built in.

At least 75% of the yarn should be solution dyed to provide color-fastness. In addition, bright accent colored yarns, mostly seen in yarn dyed products, can be an additive to improve the appearance.

Areas that would require resilient flooring, such as vinyl composition tile, would be the staff lounge, storage rooms, workrooms and areas with sinks, data room, janitor's room, electrical closets, and delivery areas. Examples of finishes include unglazed ceramic tile, vinyl tile, linoleum, or sheet vinyl.

Restrooms should have ceramic tile on the floor and on as many walls as the budget will allow. Matte floor tile and gloss wall tile is preferred for the best clean-up ability. Darker grout colors and medium tone color tiles will keep their appearance retention. Avoid extreme color schemes and patterns, as it is usually too costly to update the materials in a restroom during a remodel.

Other floor finishes to consider is an enhanced entry paving material such as porcelain tile, slate, or granite, etc. The entry flooring receives the most abuse from library patrons, as it is so frequently utilized. The final product should be highly slip-resistant and sealed to prevent stains. Darker colors show less wear. One negative aspect of hard surface flooring is the lack of acoustical control. Specifying this product in conjunction with an acoustical wall or ceiling treatment will help mitigate this issue. Transitions between all flooring materials cannot be more than ½" high per accessibility code.

WALL FINISHES should be mark resistant, attractive, durable, and easy to clean. Some maintenance crews prefer lo-gloss or eggshell paint on walls instead of vinyl wall covering because painting is easier to repair than vinyl. Specialty wall finishes are appropriate in key areas. Olefin™ wall covering, which has the appearance of a natural fiber, but is actually man-made, provides both acoustic and tackable benefits. This product can be useful in a Community Room. There are some interior plaster finishes that provide acoustical enhancements for a space. Corner guards must be specified, as book trucks can be abusive to walls. Consider chair rails in the Study Rooms to avoid wall marks from the chairs.

SERVICE DESKS are recommended to have durable worktops such as solid surface material like Corian™ or granite to withstand abuse over time. The circulation desk worktop will receive the most wear over the other service desks as books slide across the top all day long. Angling the front of service desks away from patrons will prevent the scuff marks that occur with patrons resting their feet on the front and base of the desks.

FABRICS for patrons' chairs must be durable to withstand constant use. Only high wear fabrics with over 60,000+ double rubs (wear testing terminology) should be considered. Again small-scale patterns hide wear, as does solution dyed nylons. Avoid accent



“piping” details on lounge chairs and consider reinforced stitching seams. Consider furniture made of solid hardwoods and metal as they last longer and wear better.

DOORS, of which there are relatively few in a library, none-the-less should be of commercial quality solid core with a 1¾” thickness. Finish choices are painted metal, plastic laminate, and wood veneer. All three have pros and cons. Metal can be repainted but is costly. Laminate can be washed and has many color choices but can chip on the edges. Wood veneer has more depth and warmth but can be damaged easily, although it possibly can be filled and repaired. Wood grain consistency varies with species and stains are basically (3) palettes of light (maples), medium (cherry/oaks) and dark (walnut or dark stained cherry).

CEILINGS must have good light reflectance. Acoustical treatment is required in all public and non-public assignable spaces, except for storage, custodial, and like areas.

ACCESS FOR THE DISABLED

The Architect, Designer, and Contractor are required to design and build around the current Federal and State American Disabilities Act (ADA) codes. The Hesperia Branch Library will be designed to provide barrier free access. The following are guidelines for planning but need to be confirmed with the most up-to-date codes.

All areas must be accessible by means of a 36” minimum **aisle**. Greater distances to an exit, cross aisle, or foyer increase the accessible aisle requirement in increments of 1½” per 5’ in length. If an accessible aisle is less than 60” wide, then turning and passing spaces of 60” by 60” must be located at any obstruction and at reasonable intervals not exceeding 200’.

Aisles in stack areas must comply with accessibility requirements. Side aisles, which run parallel to stack sections, can be no longer than 20 - 21 feet (6 to 7 stacked sections) without a cross aisle (range aisle) provided to break up the side aisles. Both side and range aisles are required to be 36” wide. Main aisles are principle access routes which run perpendicular to side aisles and must be a minimum of 44” wide. End aisles, which serve a single-faced section of stacks and run perpendicular to side aisles, must be a minimum of 36” wide with 48” required if side aisles are only 36” wide. Shelving height is unrestricted unless an attendant will not be available, and then it is limited to 54” above the finished floor.

Shelving for **Current Periodicals** must be accessible with a maximum side reach of 54” above the finished floor (48” preferred), and a front reach of no more than 48” above the finished floor. Shelving units should be no higher than 66” inches, or three sloped display shelves high. Range and side aisles in magazine display areas must be a minimum of 44” wide.

A minimum of 5%, but no less than one, of all fixed or built-in seating, tables, counters or carrels, whether they are for electronic stations or study, will meet with accessibility requirements. A minimum of 30” wide x 48” deep clear **floor space** will be provided with at least one unobstructed side of the floor space adjoining an accessible route or



another clear floor space. The knee space must be at least 27" high, 30" wide, and 19" deep. The top of the table, carrel, or counter shall be from 28" to 34" above the finished floor.

Audible and visual emergency warning alarms are required. No location in the room can be more than 50' from a visual signal unless there are no obstructions higher than 6' above the finished floor, in which case, devices may be placed around the perimeter spaced to a maximum of 100'.

Room or **area entrances** will be accessible by means of a 36" minimum aisle and a 36" wide door with a minimum clearance of 32". If turnstiles are used, then a readily apparent accessible door must be provided adjacent to the turnstile. Doormats must be securely attached and have a pile of no more than 1/2". Exposed edges of doormats must be fastened to the floor surface.

If a **sink** is provided, the faucets must be the lever type, electronically activated, or approved self-closing valves with a minimum 10-second flow. Faucets must be operable with a single hand and not require any twisting of the wrist, pinching, or tight grasping. A maximum of 5 pounds of operating force can be required to operate the faucets.

If use of the **sink** is essential to an employee's job (e.g., cleaning up craft projects), then an accessible wheelchair space under the sink must be provided including a minimum of 30" x 48" of clear space in front of the sink that allows forward approach. The counter next to the sink can be no higher than 34" and the sink area can be no higher than 34" above the finished floor with a clear 19" depth for knee clearance. There can be no obstructions, cabinets, or sharp objects under the sink; and hot water pipes and drains must be properly insulated. If fixed storage cabinets, drawers, or lockers are provided, at least one of each type must comply.

Portable assistive listening technology may be substituted for permanently installed technology in rooms that do not have fixed seating, or which seat less than 50 and do not have a sound amplification system. The system may be used to serve more than one room. Electrical outlets must be provided to support any portable assistive listening technology.

A 36" wide **door** with a minimum clearance of 32" is required. Interior doors can require no more than 5 pounds of pressure to operate with hardware mounted no higher than 48" above the finished floor. Thresholds cannot exceed 1/2" in height.

The library will contain no less than one accessible transaction counter located at a section of the counter that is no more than 28" to 34" high for a continuous length of 36". There is no requirement for knee clearance at checkout counters. If a self-checkout system is provided, at least one must be accessible with a counter no higher than 28" to 34" high and a knee clearance of at least 19" of clear space.

The top of the **toilet** seat must be 17" to 19" above finished floor. The toilet paper dispenser must be located a minimum of 19" high, within 12" of the front edge of the toilet seat, and provide a continuous paper flow. Side (minimum 42" long) and rear (minimum 36" long) grab bars, which will support at least 250 pounds, are mounted at 33" above the floor.



The **lavatory sink** height should not exceed 34" and a knee clearance of 29" will be provided. Paper towel dispensers and automatic hand dryers must meet forward and side reach requirements. The sink faucets must be the lever type, electronically activated, or approved self-closing valves with a minimum 10-second flow. Faucets must be operable with a single hand and not require any twisting of the wrist, pinching, or tight grasping. A maximum of 5 pounds of force can be required to operate the faucets.

Pay telephones must comply with forward (maximum of 48" above finished floor) and side reach (maximum of 54" above finished floor) requirements and at least one (and at least one-half of the total number) must be an accessible telephone. If four or more phones are available for public use, either inside or outside of the facility, and at least one is inside the facility, then at least one must provide text display capability. If telephone books are made available to the public, then they must also comply with forward and side reach requirements. If telephones are located in sound enclosures then they must have a minimum 30" clearance at the entrance.

Flooring transitions cannot exceed a minimum different height of ½" inches.

The entire Hesperia Branch Library will be single story. There will be no stairs in the building.

ACOUSTICS

Libraries have traditionally been considered a quiet place for "*individual*" tasks such as reading and studying with print materials. Everyone has had the experience of hearing the "shhh" from the librarian as a child exploring the library. Unfortunately, with the different types of resources and "*group*" activities available at the library these days, the noise level tends to grow, especially with children and young adults.

The most common way to transmit sound is through the air. However, sound and noise can also be dispatched through building materials, whether steel, concrete, wood, pipe, or wallboard. Materials should be selected that possess appropriate acoustic qualities. Careful initial building design that takes into consideration building materials will pay long-term dividends.

Acoustical control is essential to a library. Every effort should be made to explore alternatives from not only carpet but also enhanced acoustical ceiling tile or other absorptive ceiling treatments. Large gypsum board ceilings should not be utilized in group gathering areas such as the Computer Center, Community Room, Study Rooms and Children's Storytime.

Good space utilization can help minimize acoustical issues too. Computer Centers are potential areas for noise. Consider the furniture type and orientation and where noise will migrate. Separating the Children's area from the main part of the Adult Library areas would be a wise choice. Some libraries have separate, glass enclosed rooms for the Children's collections and seating to help with sound issues. This can be non-flexible in the future. Wise adjacency planning will help achieve the desired acoustic environment.



Materials are rated on a Noise Reduction Criteria (NRC) and Sound Transmission Class (STC). NRC is the rating given to a material in which the measurement of sound absorption is given a percentage with 0.0 being low and 1.0 being high. Two examples are: a (.85) rating is good for acoustical ceiling tile and a (.55) rating for acoustical operable partitions between two meeting rooms. The STC is more complicated and involves studying all of the materials and construction in the room and measures the decibels (dB) lost (either absorbed or reflected). A higher rating means a better construction assembly and materials.

The architect should hire an acoustician to review all of the criteria and make recommendations in the design phase to price alternatives and weigh the benefits.

Good acoustics are not an accident or by product, they are actively designed and managed.

ENVIRONMENTAL CONDITIONS (HEATING, VENTILATION AND AIR-CONDITIONING)

The City of Hesperia is requesting the design criteria for this project consider all sustainable and energy efficient performance specifications. HVAC is no exception. Engineers, architects, and owners should review the performance of the mechanical systems as well as the indoor air quality measures. Hesperia experiences extreme weather conditions for California and proper zoning and solar and heat gain from exterior glass orientation should be evaluated.

Libraries house various functions including stack areas, working and office areas, circulation desk, reading and Study Rooms, and conferencing space. This wide diversity of spaces requires careful consideration of mechanical systems and controls. Factors to consider include varying occupant densities, functional requirements, and times of use.

As a municipal facility, life cycle cost considerations should be carefully evaluated. This would include initial costs, operating energy cost, and on-going maintenance costs. In addition, due to the functional requirements of a library, maintenance of mechanical systems should be limited to non-public areas as much as possible.

As a community facility, aesthetic appeal and sustainability are important design considerations. Mechanical systems should be carefully integrated into the building architecture to minimize aesthetic impacts while maintaining functional requirements. Systems should also be selected to insure long-term life span with minimal impacts to the surrounding environment.

Generally the temperature within the library should be controlled at 68 and 72 when heating and 72 to 78 when cooling for energy savings. Relative humidity at 30 to 70% and ventilation at 15 cubic feet of outside air, per minute, per person, with 3 to 10 air exchanges per hour of supply air, depending upon cooling load requirements. Ventilation must provide rapid dispersal of any heat produced by equipment or a high number of occupants. Specific areas require individual thermostats with lockable covers. Sound traps and/or lined ductwork should be provided to prevent unacceptable noise levels.

An adequate supply of exhaust and intake air to promote comfort and protect health, with a minimum of 12 air exchanges per hour in all restroom both public and staff will be provided.

The main Data communications room requires a separate zone with an individual thermostat. The temperature is to be constant at 68 to 70 when heating and cooling with a relative humidity of 35% to 60%. Ventilation requires a dust filtration system and must provide rapid dispersal of any heat produced by equipment. A backup HVAC system is recommended.

Due to the extremes in weather Hesperia experiences, air or weather lock, and/or a double set of doors, will be required to maintain temperature and keep drafts from staff located near the Public Entrance.

PLUMBING AND FIRE PROTECTION

Plumbing systems are generally conventional in nature, including sanitary waste, vent, domestic hot and cold water, and storm drain systems. Restrooms should be located remote from acoustically sensitive areas. In addition, due to the public use nature of a library, sensor operated plumbing fixtures should be considered.

To prevent potential loss of library materials, it is prudent to consider routing pressurized water systems from library stack areas. Consideration of a pre-action fire protection system, in lieu of wet systems, minimizes the risk of water damage due to accidental discharge. This is critical to incorporate into the Data Communications Main Room. However, this could be amended or even added to with an FM200 System, allowing for fire suppression without water.

ILLUMINATION

Energy efficiency begins with a lower expectation in illumination output. However, above average lighting is essential to reading tasks in a library. Engineers must find a balance. Coordinating ambient daylight with artificial lighting should be considered for energy efficiency. Lighting must be uniform throughout the space, without glare and contrast. New lamps are becoming more energy efficient while increasing the light performance similar to the high output T5. Color-rendering indexes should be considered when specifying several types of lamps. Engineers and designers should refrain from specifying too many lamp types, as this is very hard to maintain in the future.

If budgets allow, indirect lighting should be considered and is usually preferred as this provides less glare on the technology screens. Directional lighting such as table lamps are helpful for individual patron and staff control of their environment. However, it is important that the task light is durable, fixed to the table, and has a covered lamp access. Accent lighting, such as low voltage Halogen, is wonderful when used appropriately and minimally, as these lamps tend to have limited life cycles.

Other requirements are as follows:

Provide 30 foot candles vertically at 30" above the floor in the book stacks. **Lighting the shelving ranges is the most critical design challenge in a library.** Lighting must be evenly distributed in the book stack area from one end of a range to the other and from



the top to the bottom of the book stack. Properly designed, directional louver devices within the light fixture will help direct light to the lowest level of shelving in the library. Provide non-glare and shadowless light within the aisles for an even distribution of light to facilitate reading book spines and books.

There are many schools of thought on this. Several ideas are described as follows:

- Stack-mounted lighting is attached to the metal shelf center uprights with custom designed support brackets that can be minimal or elaborately detailed. Usually the light is a standard catalog item but the mounting mechanism is a custom design, which has to meet seismic codes in California. Depending on the design of the mounting bracket, this design can accommodate an average height ceiling such as 9'-0". This is costly and a significant coordination issue with the architect, shelving vendor, contractor, and owner. It is not flexible nor cost efficient to move both shelves and lighting. However, it is the most effective method to ensure lighting is reached at the bottom shelf.
- Another method is indirect, direct pendants hung from the ceiling, perpendicular to all of the shelf ranges. This requires at least a 12' ceiling height to achieve the proper suspension and projection angles for the directional baffles within the lights. This method is very flexible because the lights are not tied to the shelving. Shelving furniture plans can be overlaid with the reflected ceiling lighting layout to avoid dark spots.
- A third alternative when the ceiling is low, 9'-0" high, and cost is an issue, is to provide 1'x4' high performance parabolic linear fixtures recessed in the 2'x2' or 2'x4' ceiling grid. The lights run end to end down the isle. Using the 1' width allows greater flexibility in locating these within the 36" wide isle in the "T" grid suspension system. The key here is to provide effective directional lenses on the parabolic fixtures that throw the light down farther than normal parabolic lenses.

Provide a minimum of 30 to 40 foot candles of light (with 50 foot candles preferred) at **tabletop level in the seating** areas. Provide high quality, non-glare light in the seating areas for reading and viewing computer screens. Lighting should be zoned so that a portion of the fixtures can be turned off for energy savings when natural lighting is available or when lower levels of lighting are desirable.

Enclosed rooms such as workrooms, copy rooms, the book return, Study Rooms, Community/Meeting Rooms, the Computer Center, and offices should consider, at the minimum, the standard **non-glare office lighting**, such as deep-cell parabolic fluorescent fixtures with semi-specular aluminum louvers, which are acceptable for the office and workroom areas. The lighting standard should be 30 to 40 foot candles measured horizontally at the desktop. Consideration should be given to provide for dimmable or switchable lighting to produce approximately 2-foot candles for writing during AV presentations. Consider minimal lighting for storage rooms – 10 to 15 foot candles.



The main **service desks** should have a higher level of lighting and consider a minimum of 40 to 50 foot candles of ambient light with additional non-glare task lighting of up to 75-foot candles over the workstations.

Consider **occupancy sensors** or motion detectors for energy savings in enclosed rooms such as offices, Study Rooms, and janitor, data and electric rooms.

The library's lighting switch panel should be centrally controlled, by staff only. The library entry should be lit after hours, and perimeter security lighting is recommended. Exterior drops will need bright and vandal resistant lighting for security. For security, high intensity exterior lighting is required to protect departing staff after library closing. There should be a bright and clear path to the staff parking area. Lighting should be on a timer.

POWER, DATA, AND TELECOMMUNICATIONS

Because of the complexity and need for integration, a technology consultant should be retained to design the appropriate network.

POWER DISTRIBUTION AND CONDUIT

All construction will contain adequate, conduit, ducts, subfloor space, or cable trays to accommodate the power distribution grid, media distribution network, and data network connectivity to specified areas. Deployment of wireless technology should be investigated early in the design process. Cable trays and data closets must have adequate expandability for future needs. Conduits should be hung in the ceiling unless targeted for undergrounding. All voice and data conduit should be of rigid metal construction unless a profile floor is utilized. Lighting, power, telephone, and communication outlets shall not be placed back-to-back.

The building will be designed for one and a half times the electrical and data capacity to accommodate future technology and equipment needs. Provide distribution panel boards at 480Y/227V serving lighting systems (277V) and HVAC systems (480V), as required to serve the load. Provide indoor dry type K-rated distribution transformers of appropriate reading to transform power from 480V to 208Y/12V 3 phase 4W. Provide distribution panel boards with 200% neutral bus for convenience power, dedicated receptacles, elevator controls, mechanical controls, small mechanical loads, etc., as required, and as consistent with the occupancy. All receptacles shall be specification grade provided with matching cover plates. Receptacles for specialty systems, such as emergency, isolated or ground (UPS, etc.), shall be identified by means of color, outlets and cover plates. Branch circuiting shall be copper wire type, THW and EMT conduit. Back-up power should also be considered to provide energy for security equipment and vital electronic equipment.

The main electrical room should be sized to accommodate the entire infrastructure, not only for the dedicated IDF/Server Room (with 24-hour air), but also for the emergency fire alarm, security needs, and power sources. Electrical design must ensure that the library computers have "clean" and reliable loading of circuits. Since the optimum library design is to have minimal walls, the design team will need to research floor electrical and data distribution systems such as "Walker Duct™" or a flexible Cablefloor™.



CABLE AND NETWORKING

The Hesperia Branch Library's Plan of Service Technology Plan will serve as the design-planning document for the library. The technology infrastructure and equipment described therein will be accommodated through this building program. Category 6 enhanced UL approved and rated cable should be standard throughout.

Wireless technologies will be strongly considered as the cost is decreasing and will provide the most flexibility. Hard wired phone/data cabling should be Category 6 to provide some measure of "future proofing" the building. Dedicated power outlets should be provided wherever computers or other "sensitive" electronic equipment is used.

ELECTRICAL

The future library will want to offer power and data at every available seat. This infrastructure could be considered within an integrated furniture solution. The knowledge of the commercial furniture world is penetrating the library realm with all kinds of creative solutions. Hardwired raceways bring electrical and data to the desktop. Wire management should also be considered. Nothing distracts more from a well-designed building than hanging cords. Consider one duplex or quad outlet for every data drop as a standard with adequate space for four data ports (coaxial, fiber, twisted pair). Fiber optic infrastructure is available in the City. The library will have access to a conduit run to support fiber as needed or when warranted. The engineers and architects should consider not only the uses and placement of computers and equipment today but analyze the future possibilities that will allow Hesperia library patrons to plug in their laptop anywhere in the library.

Appropriate power, voice, and data communication infrastructure must also be available in the book stack areas. Data cabling can also be distributed via conduit and J-boxes with data drops integrated into the furniture.

Each staff workstation should have three to five duplex outlets, and four data communications/telephone outlets. Provide one standard duplex communication outlet co-located with associated power on the wall 6" above any perimeter counter or 15" above finished floor at locations that support computers, phones, or other equipment.

Electrical outlets should be located in all support columns and along perimeter walls at 10-foot intervals and not less than 15" above finished floor.

SECURITY SYSTEMS

The goals of security systems should be to:

- Discourage and stop theft and destruction of library materials
- Ensure library patron and staff safety from personal perils (kidnapping, rape, robbery, etc.)
- Discourage vandalism and graffiti
- Control abuse of library technology
- Protect the facility from arson, robbery, or other property crimes



INTERIOR AND MATERIALS: The library will be equipped with a 3M™ type library materials security systems. The security portals need to be located adjacent to the circulation desk, oriented so that the public can exit only through the gates. Layout should be coordinated with the vendor as there are lateral clearances (approximately 3'-0") around any electrical or metal object that must be maintained. These systems must be compatible with the express check-out equipment and does not require staff to by pass the security sensor in each item as it is checked out.

Card readers or keypads should be considered at staff locations or other areas that require internal control.

EXTERIOR: The library will provide vandal proof exterior lighting for parking, staff entrance, and landscaped areas. The building should not create spaces that harbor or hide people (patios, alcoves, or other areas that cannot be observed by staff directly). Consideration should be given to anti-graffiti coatings.

ALARMS: The library should be protected with fire and burglar alarms. All doors should have locks, opened by keys or electronic key cards. Emergency exits will be alarmed to prohibit unauthorized entry or exit by patrons, and be outfitted with panic hardware. Electronic surveillance equipment will be employed with both audible and silent alarms. Panic buttons should also be integrated into the design at each public desk. These silent alarms should be patched directly to the Hesperia Police Department for immediate response. All building entry and exiting points will be controlled.

FIRE SAFETY: To prevent potential loss of library materials, it is prudent to consider routing the pressurized water system from library stack areas. Consideration of a pre-action fire protection system, in lieu of wet systems, minimizes the risk of water damage due to accidental discharge. This is critical to incorporate into the Data Communications main Room. However, this could be amended or even added to with an FM200 System, allowing for fire suppression without water. Fire alarms, and prevention and control apparatus' should be accessible to authorized personnel, yet not generally inviting to curious patrons.

Visual alarms must be placed 80" above the highest finished floor or 6" below the ceiling, whichever is lower. No location within a room can be more than 50' from a visual sign unless there are no obstructions higher than 6' above the finished floor. If obstructions are present, devices must be deployed on perimeter at 100' maximum spacing.

SPECIAL ACCESS CONTROL - The City would like to access the library entrance, public restrooms, Community Room, and Computer Center before or after the main library areas are open. They will provide staffing for an event and monitor the security. A rolling gate or other such device needs to be designed in conjunction with the library materials security gates. The materials of the after hour "gate" will need to be approved with the security theft detection gates, as they are sensitive to metal.



Rooms that require locks: Data/Communications Room, Electrical, Janitorial, General Storage/Closet, Branch Manager Office, Children's Workroom, Kitchen/Storage, Public Meeting Rooms, Computer Center, and Staff Exterior Entrance.

SIGNAGE

Good signage can help reduce the patrons' dependency on staff to locate materials in the library. Giving information clearly and in the right location is key. There are many signage categories and the more permanent ones such as directional or the main areas will not want to change. Other signage will need to be flexible when the information changes including shelving, policies, and up-coming events. They can enhance the design theme and clean up the visual information of the library. The Architect, Designer, and Contractor are required to design to meet the current Federal and State American Disabilities Act (ADA) requirements. The following are guidelines but must be confirmed with each project.

Directional signs must be wall-mounted or ceiling hung at least 80" high when suspended overhead on a path of travel and must have characters and numbers that are appropriately sized according to the viewing distance, but no less than 3' in height. Characters must have a width-to-height ratio of between 3:5 and 1:1 and a stroke width-to-height ratio between 1:5 and 1:10. The characters must contrast with their background and must be in a matte, eggshell, or other non-glare finish.

Permanent **room identification signage** must be wall-mounted on the latch side of any door or entrance at 60" above the finished floor and shall be 1/32" raised uppercase sans serif type characters accompanied by Grade II Braille.

Signage requirements include **directional signs for major collection** categories, such as "Videos", "New Books", "Mysteries", and "Textbooks". A changeable insert sign system is required for stack end panels. Shelf face sign carriers may be required.

Additional requirements include fire life safety lighted exit signs, and may include a building floor directory, pictogram flag signs in traffic paths for elevators or restrooms, donor recognition plaques, and restriction signs, such as:

- "Emergency Exit Only"
- "Video's Circulate for One Week"
- "No Cell Phones"
- "New Books Circulate for One Week"
- "Quiet Please"
- "Please Do Not Reshelve Library Material"
- "No Food or Drink"
- "Children's Room Open at Noon"
- "Story Hours on Wednesday"
- "Tutors Available after 3:30 pm"
- "Magazines Do Not Circulate"
- "Please Leave Kitchen Clean"
- "Printing Available at Reference Stations"



AUDIO-VISUAL SYSTEMS

Visual communication in today's world is essential, especially when in a teaching training environment. When these environments have more than a handful of people, the ability to communicate with 8 ½ x 11 paper materials is difficult at best. Even simple technology such as chalkboards, whiteboards, and flip charts will not solve the problem. These tools will only be effective to add to the discussion on an informal basis. Presentations in large formats, prepared on readily available databases, are required for multiple audience participation and communication.

Full audio-visual capabilities are planned for the Community Room and Computer Center. Computer training will be greatly enhanced by providing the ability for students to view a large screen projected image of the instructor's computer screen.

There are two formats for viewing large media – front projection and rear-projection. Front projection is where a piece of equipment (LCD) projects media forward onto a screen and rear is the opposite. Rear projection achieves a higher quality of imagery. This system is also inflexible and costly and is not recommended in a community room such as the one proposed for Hesperia. Computer training will be greatly enhanced by providing the ability for students to view a large screen projected image of the instructor's computer screen.

Basic requirements are to support end-user presentations via the following list of mediums:

- PC based programs such as PowerPoint
- Videos via VCR player
- DVD
- CD

Computer based programs will utilize a front projection system such as an LCD ceiling mounted projector and ceiling mounted motorized screen. VCR, DVD, and CD players will be on a cart connected to a TV Monitor. Other pieces of equipment required are Amp boxes that interface with the AV and PC based technology, which are separate formats. The TV will have cable that can connect to local educational programs. Speakers should be considered in the Computer Room, but essential in the much larger Community Room.

Equipment in either room can be controlled at the podium or instructor's desk or a recessed equipment niche at the front of the room. Equipment racks and conduit installation for routing of cabling between the projector and the instructor's workstation need to be coordinated. Again, Wireless technology is the preferred method of use, if researched at the time of construction proves worthy. Consider a touch panel AMX system that controls shading devices, lights, screen, equipment, and projector. Dividing the Community Room will complicate the design but will not be insurmountable.

Projection is recommended over monitors in rooms seating more than 12 people. The top of the screen should be located at least 6 inches from the top of the wall to minimize reflections off the ceiling. The bottom edge of the screen should not be lower than 4 feet from the floor to provide a clear sight line to the entire screen from any seat in the room. For a more fully integrated presentation environment allowing unobstructed presentation,



in a fully lighted room with no noise generated by projection equipment, a rear screen projection system is recommended. This framed, translucent “window” installed in the front wall of a room requires up to eight feet of clear space behind the projection surface. Rear screen projection will be considerably more expensive and require a great deal more space than a ceiling mounted front projection screen.

VISUAL SUPERVISION

One of the most important considerations when designing a library should be visual supervision by each of the Service desks – Circulation, Reference, and Children’s. This is for the health and safety of both staff and patrons. The book shelving is over 90” high and can act as a visual barrier for staff. The orientation of the rows to the service desks is very critical. The book stack and seating areas should be laid out to optimize visual supervision, however it may not be possible to have all areas visible to staff at the desk. Any areas not easily observed by desk staff may require monitoring by a security camera.

Interior glazing is critical in some rooms for the safety of patrons and staff. Those rooms are usually study rooms, children’s areas, young adult areas, computer centers, Friends of the Library room, and restroom entrance areas.

The staff entrance should be inaccessible to the public inside the building and well lighted for the safety of staff leaving the building at night. A buzzer, doorbell or intercom speaker is desirable if this is also a service delivery entrance. There should be a small view window in the entrance door.

MASTER LIST OF FURNITURE AND EQUIPMENT

This list was created from the *Libris Design*™ program generated from the library requirements in the following Sections 3-7. The total square feet allocated to these items are 15,500 assignable square feet. Within some inventory items, there is not an assignable unit per square feet. The individual reasons described below are as follows:

- Inventory item is attached to the wall such as an art print, whiteboard or clock.
- Inventory item is resting on a work surface such as fax machine or bar code reader.
- Assignable square feet for reader tables and technology carrels are inclusive of the chairs.
- An assignable square feet for cabinetry - above and below, is included in the workstation- countertop.

MASTER INVENTORY LIST

Inventory	Quantity	Unit SF	Extended
Art Print	1	0	0
AV Bin, Depressible	1	10	10
AV/Technology Equipment Cart, Small	1	10	10
Bar Code Reader, Fixed Mount	6	0	0
Bench (2 Person)	1	15	15
Book Bin, Depressible	1	0	0
Book Bin, Depressible	1	12	12
Book Truck	13	10	130
Box, Cardboard	5	0	0
Box, Cardboard	10	4	40
Bulletin Board	8	0	0
Cabinet, AV Equipment	1	12	12
Cabinet, AV Equipment	1	15	15
Cabinets, Above Counter	29	0	0
Cabinets, Above Counter (Lockable)	12	0	0
Cabinets, Below Counter	12	0	0
Cabinets, Below Counter (Lockable)	18	0	0
Carrel, Reader's Wood	8	40	320
Case, Floor Display	4	30	120
Cash Register	1	0	0
Chair, Café	5	0	0
Chair, Child's	16	0	0
Chair, Group Study	20	0	0
Chair, Juvenile	32	0	0
Chair, Lounge	22	35	770
Chair, Meeting Room - Stacking	120	10	1,200
Chair, Reader's	64	0	0
Chair, Supervisor's	1	0	0
Chair, Task	16	0	0
Chair, Technology Workstation	30	0	0
Chair, Technology Workstation Task	20	0	0
Chair, Visitor's	1	15	15
Change Machine (Bill & Coin)	1	15	15
Cleaning Cart	1	0	0
Clock	11	0	0
Coat & Hat Rack	1	20	20
Coffee Maker/Urn	2	0	0
Commode	7	0	0
Computer Server, Mini (CPU)	2	0	0
Computer Stand	1	0	0
Computer, OPAC Desktop	8	0	0
Computer, Public Desktop	45	0	0
Computer, Staff Desktop	15	0	0
Console, Computer System	1	0	0
Copier, B&W Freestanding	2	50	100
Credenza	1	28	28
Cushion, Floor	34	7	238
Cutting Board, Kitchen	1	0	0
Desk, Branch Manager's	1	65	65



Desk, Friends'	1	60	60
Diaper Changing Counter	2	0	0
Dictionary Stand	1	10	10
Dictionary Table Top Stand	1	0	0
Dolly, Chair	7	12	84
Dolly, Table	5	12	60
DSU/CSU Telecommunications Device	1	0	0
DVD Player	1	0	0
FAX Machine, Desktop	1	0	0
FAX Machine, Desktop Card-Operated	1	0	0
File Cabinet, Lateral (Four Drawer)	1	20	20
File Cabinet, Lateral (Three Drawer))	3	20	60
File Cabinet, Lateral (Two Drawer)	1	20	20
File Cabinet, Vertical (Four Drawer)	4	14	56
Fire Extinguisher, Halon	1	0	0
First Aid Kit	1	0	0
Flat File	1	40	40
Flip Chart With Stand	2	0	0
Garbage Bin, Interior	1	15	15
Hand Dryer	3	0	0
Hand Truck	1	0	0
Hot Water Urn	2	0	0
In & Out Board	1	0	0
Instructor's Station, Systems Furniture	1	100	100
Key Cabinet	1	0	0
Kitchen Unit	1	20	20
Kitchen Unit	1	25	25
Label Maker	1	0	0
Ladder, Step	1	0	0
Lamp, Table	2	0	0
Laser Pointer	1	0	0
Lectern (w/ Space For A Portable Computer)	1	50	50
Literacy Tutoring Counter	1	40	40
Locker	5	5	25
Mat, Anti-fatigue	4	0	0
Microphone, Floor	1	0	0
Microphone, Lavalier	1	0	0
Microphone, Table	1	0	0
Microwave Oven	2	0	0
Mirror	1	0	0
Mirror, With Shelf	3	0	0
Mop Bucket	1	0	0
OPAC Stand At End Of Book Range	2	40	80
Paper Cup Dispenser	1	0	0
Paper Cutter	1	0	0
Paper Towel Dispenser	8	0	0
Postage Meter/Scale	1	0	0
Preparation Counter	1	40	40
Printer, Ink-Jet (B&W)	10	0	0
Printer, Ink-Jet (Color)	1	0	0

Printer, Laser (B&W)	3	0	0
Printer, Receipt	2	0	0
Projection Screen, Motorized Ceiling	3	0	0
Projector, Data Portable	1	0	0
Projector, Overhead	1	0	0
Projector, Portable AV & Computer LCD/DLP	3	0	0
Projector, Slide	1	0	0
Queuing Space (Per Person)	15	6	90
Rack, Computer / Communications Equipment	1	0	0
Rack, Literature Display Handout	2	0	0
Recycling Bin	4	0	0
Router/Switch	1	0	0
Safe, Data / Tape Carrier	1	0	0
Safe, Floor	1	0	0
Security System Book & Media Resensitizer	2	0	0
Security System Book Desensitizer	2	0	0
Security System Book Resensitizer	1	0	0
Security System Desensitizer/Resensitizer	2	0	0
Security System Gates, Inventory Control	1	75	75
Security System Media Desensitizer	2	0	0
Security System Media Resensitizer	1	0	0
Self Check-Out Counter	1	30	30
Self Check-Out Machine	1	0	0
Server, Desktop / Rack Mount	1	0	0
Shelving, DF 90"h Steel W/14 Shelves	6	18	108
Shelving, Industrial	1	0	0
Shelving, Industrial	4	15	60
Shelving, SF 42"h Steel W/ 2 Shelves	2	12	24
Shelving, SF 60"h Wood W/ 4 Shelves	2	14	28
Shelving, SF 82"h Bookstore Display	2	21	42
Shelving, SF 84"h Steel W/ 6 Shelves	21	12	252
Shelving, SF 84"h Wood W/ 6 Shelves	2	14	28
Sign, Announcement	1	0	0
Sink	1	0	0
Sink	2	18	36
Sink And Counter	3	0	0
Sink, Mop	1	0	0
Soap Dispenser	6	0	0
Sofa (2 Seat)	1	55	55
Stamp Machine, Postal	1	0	0
Stapler, Electronic Binding	1	0	0
Stool, Child's	1	0	0
Stool, Kick-Step	12	0	0
Storage Cabinet	7	18	126
Supply Cabinet	1	0	0
Supply Cabinet	1	18	18
Table, Café	1	60	60
Table, Children's	4	80	320
Table, End	2	10	20
Table, End	3	12	36
Table, Group Study	3	160	480
Table, Juvenile	8	85	680

Table, Meeting Room	20	0	0
Table, Reader's	6	80	480
Table, Reader's	5	90	450
Table, Reader's	3	100	300
Table, Work	1	120	120
Tape Drive, External DAT / Cartridge Tape	1	0	0
Technology Carrel	3	35	105
Technology Carrel	7	40	280
Technology Carrel	14	45	630
Technology Carrel	4	50	200
Technology Carrel, Adjustable (Manual) Height	4	45	180
Technology Counter	2	35	70
Technology Training Table, Computer Lab	10	50	500
Telecommunications Backboard	1	0	0
Telecommunications Equipment/Hub/ Multiplexer	1	0	0
Telephone Central Station	1	0	0
Telephone Handset	16	0	0
Toaster Oven	1	0	0
TV Monitor, 20"	1	0	0
Typewriter, Electric	1	0	0
Uninterruptible Power Supply (UPS), Single Device	1	0	0
Urinal	2	0	0
Vacuum Cleaner, Dry Upright	1	0	0
Vendor Card Encoder/Dispenser	1	0	0
Video Cassette Player/Recorder	1	0	0
Waste Basket	39	0	0
Waste Basket	5	4	20
White Board	10	0	0
Workstation, Administrative Asst. Office System	1	40	40
Workstation, Children's Counter	1	55	55
Workstation, Children's Desk	1	80	80
Workstation, Circulation Check-In Counter	2	30	60
Workstation, Circulation Check-In Counter	1	40	40
Workstation, Circulation Check-Out Desk	3	80	240
Workstation, Food Preparation Counter	5	30	150
Workstation, Food Service Counter	2	45	90
Workstation, Literacy Office System	1	40	40
Workstation, Mending Counter	1	30	30
Workstation, Reference Desk	2	80	160
Workstation, Reference Office System	1	40	40
Workstation, Sorting Counter	2	40	80
Workstation, Young Adult Office System	1	40	40
Inventory Sub-Total:			10,988

SHELVING INVENTORY

Inventory	Quantity	Unit SF	Extended
36" Aisle DF 45"H Steel Shelving W/ 4 Shelves	2	18	36
36" Aisle DF 45"H Steel Shelving W/ 6 Shelves	40	18	720
36" Aisle DF 66"H Steel Shelving W/ 10 Shelves	37	18	666
36" Aisle DF 66"H Steel Shelving W/ 8 Shelves	5	18	90
36" Aisle DF 78"H Steel Shelving W/ 10 Shelves	26	18	468
36" Aisle DF 90"H Steel Shelving W/ 14 Shelves	111	18	1,998
36" Aisle SF 45"H Magazine Display Shelving W/ 2 Shelves	2	12	24
42" Aisle DF 45"H Steel Shelving W/ 6 Shelves	2	20	40
44" Aisle DF 45"H Newspaper Display Shelving W/4 Shelves	4	22	88
44" Aisle SF 66"H Magazine Display Shelving W/3 Shelves	12	14	168
44" Aisle SF 66"H Newspaper Display Shelving W/3 Shelves	2	14	28
Audio Book Rotor Tower DF 66" Shelving Unit	2	18	36
Audio Cassette Rotor Tower DF 66" Shelving Unit	1	18	18
CD-ROM Rotor Tower DF 66" Shelving Unit	3	18	54
DVD Rotor Tower DF 66" Shelving Unit	1	18	18
Video Cassette DF 66" Shelving Unit W/10 Divider Shelves	3	20	60
Shelving Sub-Total:	253		4,512

SITE AND ACCESSIBILITY

Generally, a library site should be designed to incorporate the following:

- Exterior (including walkway) lighting adequate for safety and security, on timer
- Bicycle racks
- Vehicle accessible book return, with flat pathway for using book trucks to retrieve items
- Strategically positioned trash and smoking receptacles, in relative proximity to entrance, with consideration to wind orientation and other factors that could cause smoke infiltration into Library
- Loading and accessible spaces for handicapped
- Screened dumpsters
- Pay telephones (once disabled accessible)
- Appropriate signage to direct patrons to entrance from various points on site
- Appropriate landscaping and plantings

An accessible route to and from the facility to all transportation, parking, sidewalks, and buildings must be provided. This route must be a minimum of 36" x 36" and necessary space to facilitate turning. No level changes to route without accessible ramping. Ground surfaces must be firm, stable, and slip resistant. Appropriate warning devices must be employed to alert of hazardous areas or improvements that could result in peril. Adequate accessible parking spaces must be provided no less than one per 25 parking stalls. These spaces must be at least 8' wide and be served by an accessible aisle 5' wide for a total width of 13'. These accessible spaces should be positioned closest to the library entrance. Curb ramps are required where aisle converges with curb. Ramps must be fully contained in a marked crossing area.



ENTRANCE

The library should prominently display the hours of operation, visible when closed. Library service entrances require a minimum of 90" clearance for specialized inventory control devices. Security gates must be positioned a minimum of 3' from any metal surface and 8' from electronic workstation to prevent electronic interference.

The library entrance should provide customary fixtures and treatments including foot cleaning mats or grates, public telephones, drinking fountains, informational and directional signs, and security systems.